





Certificate of Analysis

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PRODUCT NAME Azadirachtin B

PART NUMBER 00011111

STANDARD TYPE Primary (P)

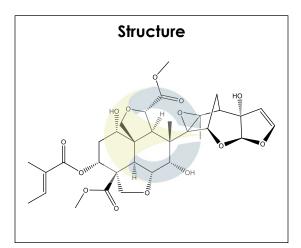
LOT NUMBER 00011111-0156

REPORT NUMBER CDXA-RSS-8862-00

SAMPLE NUMBER CDXP-20-00156

DATE OF SAMPLE 03/16/2020

DATE OF REPORT 04/07/2020



CHEMICAL NAMES 3-Tigloylazadirachtol, Deacetylazadiractinol

CHEMICAL FORMULA C₃₃H₄₂O₁₄

MOLECULAR WEIGHT (MW) 662.68

CHEMICAL FAMILY Limonoids

CAS NUMBER [106500-25-8]

EC#(EINECS) NA

RTECS NA

ANALYTICAL RESULTS

TEST	METHOD	SPECIFICATION	RESULT
Adjusted Purity	NA	NA	95.9%
HPLC	See Below	NA	96.9%
NMR	0.700.12.4	Conforms to structure	Conforms to structure
Mass Spectrum	0.700.12.27	Conforms	Conforms
Residual Solvent*	USP <467>	NA	Ethanol – 0.4% Ethyl Acetate – 0.6%
Water	0.700.12.37	NA	ND
Appearance	NA	NA	White powder

*Testing performed at an ISO 17025 accredited subcontracted laboratory.

ADJUSTED PURITY: 95.9% IS BASED ON (100 - 1.0 SOLVENTS - 0.0 WATER) X 96.9% HPLC

STORAGE CONDITIONS

STORAGE -20 °C in a dry place.

EXPIRATION DATE 03/2025 under the above conditions.







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ANALYTICAL CONDITIONS

INSTRUMENT AGILENT 1260 HPLC UV-VIS (DAD); AB-SCIEX 6600 TRIPLE TOF

COLUMN Phenomenex Luna C18(2) 150 x 2.00 mm, 5 μm particle size

MOBILE PHASE A - 0.1% Trifluoroacetic acid in Ultrapure water, B - Acetonitrile;

Isocratic 5% B for 5 minutes, then increasing to 95% B over 20 minutes. Hold at

95% B for 15 minutes, then decreasing to 5% B over 1 minute.

COLUMN TEMP. 30 °C

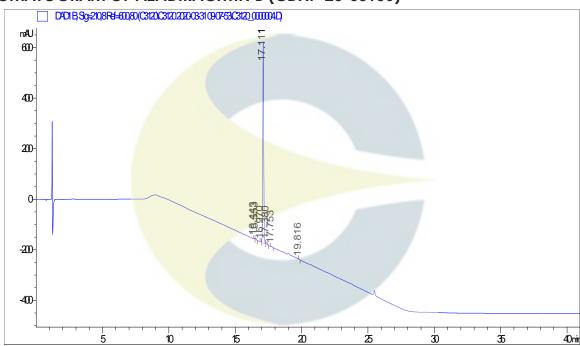
FLOW RATE 0.4 mL/minute

INJECTION VOL. 1.0 μL

INJECTION CONC. 1.6 mg/mL in Acetonitrile

DETECTION $210 \pm 4 \text{ nm}$

HPLC CHROMATOGRAM OF AZADIRACHTIN B (CDXP-20-00156)





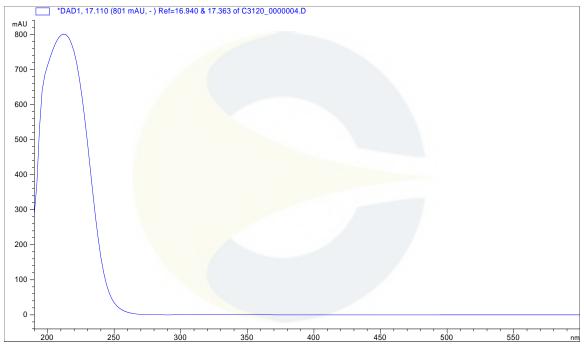




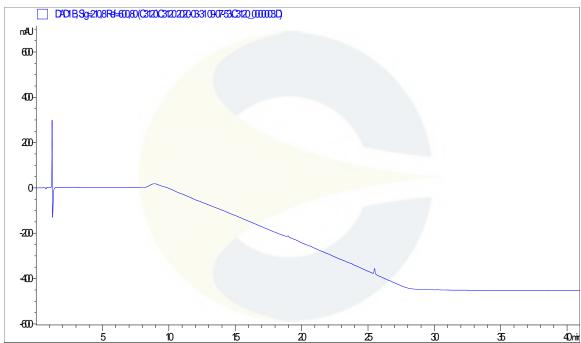
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UV SPECTRUM AT RT = 17.1 MINUTES



HPLC CHROMATOGRAM OF DILUENT BLANK





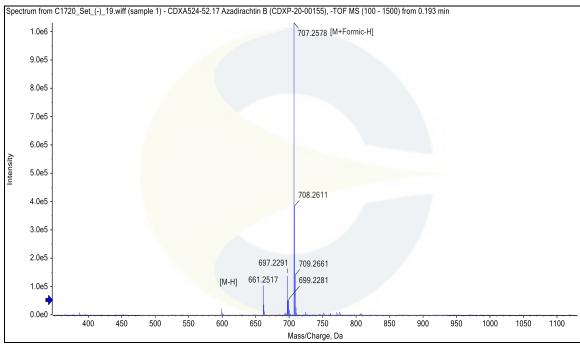




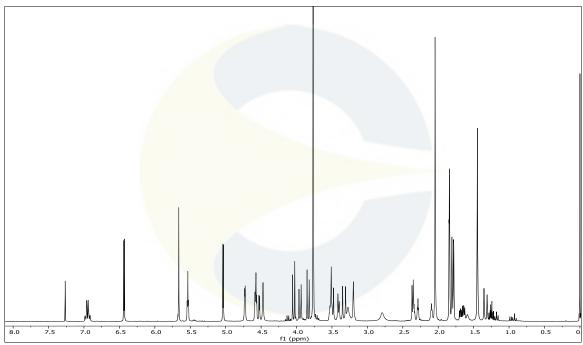
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MASS SPECTRUM OF AZADIRACHTIN B (CDXP-20-00156)



¹H-NMR SPECTRUM OF AZADIRACHTIN B (CDXP-20-00156) in CDCl₃ + TMS





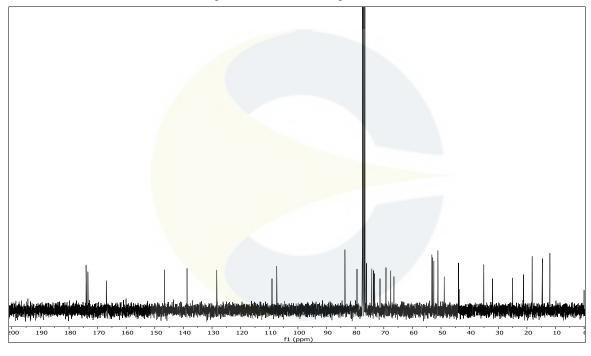




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¹³C-NMR SPECTRUM AZADIRACHTIN B (CDXP-20-00156) IN CDCl₃ + TMS





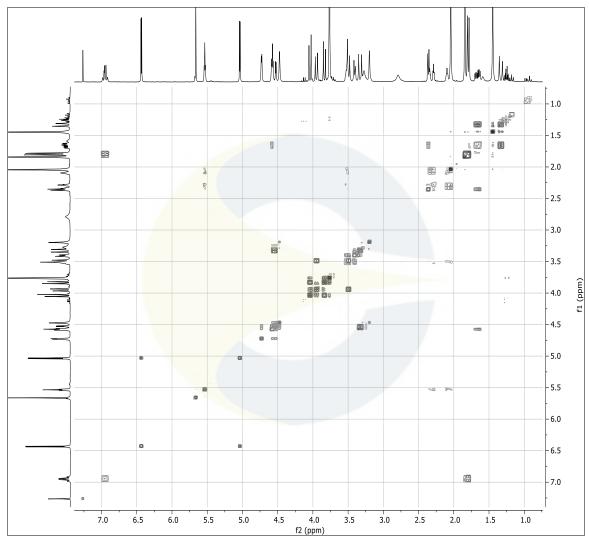




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COSY-NMR SPECTRUM OF AZADIRACHTIN B (CDXP-20-00156) IN CDCI₃ + TMS



REVISION HISTORY

Revision History	<u>Date of Revision</u>	Document/Changes
00	04/07/2020	New report